

MONOTONOUS UP-COUNTER IN AN INTEGRATED CIRCUIT

ABSTRACT

5 An increasing monotonous counter over n bits formed as an integrated circuit,
comprising: an assembly of $2^{n+1}-(n+2)$ irreversible counting cells distributed in at least n
groups of 2^p-1 counting cells, where p designates the group rank; and at least $n-1$ parity
calculators, each calculator providing a bit of rank p , increasing from the most significant
bit of the result count, taking into account the states of the cells of the group of same
10 rank.